

Abstract for the 2011 Fermi Science Symposium, May 2011, Rome, Italy:

Unresolved Blazar Component of the Extragalactic Gamma-ray Background

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We present new theoretical estimates of the relative contribution of unresolved blazars and star forming galaxies to the extragalactic gamma-ray background and discuss constraints on the contributions from other possible components. We find that the *Fermi* data do not rule out a scenario in which the extragalactic gamma-ray background is dominated by emission from unresolved blazars. The spectrum of unresolved FSRQs, when accounting for the energy dependent effects of source confusion, could be consistent with the combined spectrum of the low energy EGRET extragalactic gamma-ray background measurements and the *Fermi*-LAT measurements above 200 MeV.